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# Soviet Grain Export Outlook

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The Soviet Union, after a long period of insignificant exports, has again become a substantial exporter of grain, principally wheat. Most of this has been going to the Eastern European satellite countries. Out of the more than 140 million bushels of Soviet wheat exported in 1957-58, almost 80 percent was shipped to the Satellites; and of the nearly 2 million metric tons of rye, barley, oats, and corn exported in calendar year 1957, these countries were the recipients of two-thirds.

During 1958-59, however, a larger portion of Soviet wheat exports moved to Free World markets, where it competes with U.S. wheat. Even though this year's exports may be reduced considerably by the widespread drought, indications are that in the years ahead the Soviet Union may continue to have large supplies of wheat for export. But any assessment of the Soviet grain export outlook must take into consideration the fact that exports of grain, like Soviet trade generally, depend on government decisions. And these decisions are motivated not only by the ordinary commercial considerations of supply, demand, and price, but also by frequently shifting political-economic and propaganda ends.

Basically, though, the two things that will determine Soviet export capability are the volume of grain produced and the emphasis placed on expanding livestock output. Obvious-

ly, with a large grain crop there is a larger quantity available above domestic requirements which can be exported. It is true that under the Soviet system domestic requirements can be restricted by direct government action. But for political and psychological reasons, this has become less likely during the post-Stalin period. Therefore, the volume of production is more important in evaluating export supplies than it was formerly — though there is still a dearth of reliable data on production and utilization.

It is also obvious that because of the large Soviet program for the expansion of livestock, no substantial rise can logically be expected in exports of feed grains. A shortage of feedstuffs had long been a bottleneck in Soviet livestock production. But this does not mean that feed grain exports on the present relatively small scale—1 million to 1.5 million metric tons—will not continue and even become somewhat larger. Rye exports are also likely to remain relatively small because of a limited foreign market.

## Expanded Wheat Acreage

Any significant expansion must be in wheat exports; and by far the most important fact with regard to wheat

in the Soviet Union is the increased production capacity resulting from a large expansion of acreage. By bringing virgin and long-uncultivated land east of the Volga and the Urals under cultivation, Soviet wheat acreage was increased 43 percent between 1953 and 1957, reaching a total of 171 million acres (spring and winter wheat). In 1958 and 1959, there was a decline in spring wheat, partly perhaps because of weather conditions. Also, there has been a decrease in rye acreage since 1953. Yet this past year the combined wheat and rye acreage was still somewhat over 200 million, or 40 million acres more than 1953.

It is as yet too early to gage the full extent to which the "new lands" program has permanently increased Soviet wheat production. Still, there is enough information to show that this great expansion of the wheat area has also had its weak side. Most of the new acreage is in semihumid and semiarid zones, where the growing season is short, droughts are frequent, and yields vary widely from year to year. Consequently, it is well recognized in Soviet agricultural circles that, in order to prevent dust-bowl conditions and crop failures, a part of this new lands acreage—perhaps a fifth or more—should be annually rotated as summer fallow. So far this practice has not been followed to any extent. To replace the acreage, additional new land would have to be brought under cultivation if the cropped acreage is to be maintained.

## Stockpiling

The instability of production because of the sharp fluctuations in yields places a serious limitation on the export capabilities of the Soviet Union. It certainly makes large stocks of grain essential. Famine conditions in the past and strategic considerations no doubt have strengthened the Soviet propensity for stockpiling; so that it is not surprising that following the

HYPOTHETICAL SOVIET WHEAT AND RYE BALANCE, 1965

<b>Wheat:</b>		Mil. bu.
Production (160 million acres × 13.5 bu.)	.....	2,160
Waste (5 percent)	.....	—108
Seed (160 million acres × 2.2 bu.)	.....	—352
Net production	.....	1,700
<b>Rye:</b>		
Production (42 million acres × 16 bu.)	.....	672
Waste (5 percent)	.....	—34
Seed (42 million acres × 2 bu.)	.....	—84
Net production	.....	554
<b>Wheat and rye:</b>		Mil. m.t.
Net production (46 + 14 million m.t.)	.....	60
Food requirements (234 million population × 0.2 m.t. of grain)	.....	47
Residual supply (60 million m.t. — 47 mil m.t.) <sup>13</sup>	.....	13

<sup>1</sup> Or 46 million metric tons. <sup>2</sup> Or 14 million metric tons.

<sup>3</sup> Available for exports, stockpiling, animal feeding, etc.

large 1958 harvest Soviet Premier Khrushchev emphasized the need for bigger stocks. Once stocks reach a certain level, it is only logical to expect stockpiling to diminish, unless reserves are depleted by a crop failure. Therefore, in the long run, barring a more-than-normal succession of mediocre crops, stockpiling is not likely to reduce the export capabilities of the Soviet Union.

### Consumption Shifts

A far more serious limitation on exports arises from increased domestic grain requirements. With a fairly heavy rate of seeding—more than 2 bushels to an acre of wheat—large quantities of grain have to be used for sowing of the large acreage. Then there is the element of waste which runs higher than in Western countries and is assumed to be around 5 percent of the harvested crop. Next and most important is the use of grain for human food.

As food, wheat and rye should be considered together because the two bread grains are to a large degree interchangeable and complementary. Formerly there was heavy reliance on rye; at present, wheat consumption is probably greater. The future may see an increasing shift away from cereal consumption as the Soviet Union's urban population grows. (It is now close to half of the population.) So while the present per capita consumption of bread grains is not known, it is doubtless less than the 550 pounds per year that were being consumed in the 1920's. Moreover, it seems unlikely that this figure will be reached again.

Whatever per capita consumption is, it is magnified by the USSR's yearly population growth which has been estimated at 3.5 million. On this basis, the present population of 208.8 million (according to the census of January 15, 1959) will have increased by nearly 25 million by the end of 1965. If we assume, in the absence of any definite information, that an average of about 440 pounds of wheat and rye is a realistic 1965 per capita consumption figure, then the Soviet Union will be confronted with increased requirements of close to 5 million metric tons.

### Hypothetical Balance

If certain other things are assumed, namely, average weather conditions, acreages not too different from those of the current year, and a moderate increase in yields, a hypothetical balance for 1965 can be postulated. This balance indicates a residual supply of 13 million metric tons of wheat and rye, or close to 480 million bushels of 60 pounds that would be available for export, stockpiling, and animal feeding. Also, a small quantity might be needed for industrial purposes, principally for making alcohol.

Assuming too that large-scale stockpiling would not be needed, the allocation of this residual supply would depend on whether exports or animal feeding had priority. It is quite certain that the Soviets would have to export 2 million to 3 million tons of bread grains to the Satellites and even more should a poor crop occur in those countries. Further, more active trading of the USSR with the industrial countries of the West, as foreshadowed by the Soviet-British 1959 trade agreement, would tend to spur grain exports as a means of payment for imports, unless the Soviets would become more willing to part with their hoarded gold and use it for international payments.

Seriously competing with exports is the need of grain for feeding the already greatly increased livestock numbers, let alone those resulting from the further expansion of the industry which is planned. How much of the bread grains is used for this purpose is not known. Probably the amount varies with the size and quality of the crop—the larger the crop and the poorer the quality, the more of it is fed to livestock.

The Khrushchev administration, of course, has emphasized corn for livestock feeding, despite the fact that most of the country is climatically ill-suited for corn culture. It is problematical whether production of corn and other feed grains will increase so much faster than production of food grains that the feed requirements will be met. Thus, a strong commitment to the livestock program and to the raising of the standard of living may dictate either a heavy diversion

of bread grains to animal feed, or a shift to the growing of feed grains.

### Possible Trend

It is impossible of course to foresee the actual order of priorities in grain utilization in the USSR that may be established 6 years hence. The government certainly has the power to make a choice. No doubt the whole residual supply in the bread-grain hypothetical balance and much more could easily be absorbed by animal feeding. Perhaps it would be more realistic to assume that half of it would be used as animal feed and about 2½ million metric tons exported to the Satellites. This would leave 4 million tons (equivalent to approximately 150 million bushels) available for export to Free World markets. Yet it cannot be overemphasized that the figures in the residual supply on which exports depend are predicated on a number of assumptions, of which the continuity of the large bread-grain acreage and average weather conditions are central. Possible deviations from these assumptions subject the figures to a considerable margin of error, both of overestimation and underestimation. Nevertheless, as they stand, they offer a clue to the future trend in Soviet grain production and utilization.

TABLE 1.—Wheat, including flour: Russian exports, selected averages 1901-54, annual 1955-58

Year ending June 30	Exports	Year ending June 30	Exports
	Million bushels		Million bushels
Average:		Average—Continued	
1901-04 .....	117.3	1950-54 .....	<sup>1</sup> 60.2
1905-09 .....	125.3	Annual:	
1910-14 .....	165.7	1955 .....	<sup>2</sup> 63.9
1925-29 .....	16.9	1956 .....	37.3
1930-34 .....	49.2	1957 .....	159.8
1935-39 .....	24.5	1958 .....	144.5
1946-49 .....	<sup>1</sup> 35.2		

<sup>1</sup> Estimates. <sup>2</sup> Includes an estimated allowance of 44 million bushels believed to have been shipped to East Germany and Czechoslovakia for which no official statistics are available.

TABLE 2.—Wheat, Exports: from the Soviet Union, by country of destination, and imports, 1955-57 <sup>1</sup>

Country	1955	1956	1957
<b>EXPORTS</b>	Million bushels	Million bushels	Million bushels
<b>Soviet Bloc countries:</b>			
Albania .....	0.4	0.6	3.0
Bulgaria .....	.6	.3	6.4
Czechoslovakia .....	25.8	8.3	47.6
East Germany .....	17.5	24.6	40.3
Hungary .....	.9	—	11.1
North Korea .....	1.0	1.8	1.5
Poland .....	3.3	2.8	41.3
Rumania .....	11.1	1.6	16.8
Total .....	60.6	20.0	168.0
<b>Non-Bloc countries:</b>			
Denmark .....	.3	.1	.3
Egypt .....	—	4.4	11.3
Finland .....	6.5	5.2	9.6
Netherlands .....	.8	.4	.1
Norway .....	4.0	3.2	3.7
India .....	—	1.5	—
Sweden .....	—	—	.5
United Kingdom .....	1.2	.2	1.4
Yugoslavia .....	—	18.3	5.4
Total .....	12.8	33.3	32.3
Undistributed .....	1.4	—	—
Grand total .....	74.8	53.3	200.3
<b>IMPORTS</b>			
Total .....	1.1	16.3	4.5

<sup>1</sup> Deliveries made under special aid programs are excluded.

<sup>2</sup> 21.4 million bushels imported by East Germany, according to East German statistics.  
Soviet sources.

TABLE 3.—Corn: Exports from the Soviet Union, by country of destination, and imports, 1955-57 <sup>1</sup>

Country	1955	1956	1957
<b>EXPORTS</b>	Million bushels	Million bushels	Million bushels
<b>Bloc countries:</b>			
Albania .....	—	0.1	—
Czechoslovakia .....	3.1	8.0	.8
East Germany .....	3.9	1.6	.2
Total .....	7.0	9.7	1.0
<b>Non-Bloc countries:</b>			
Austria .....	—	.4	.4
Belgium .....	.2	.1	—
Finland .....	.6	.5	1.0
Holland .....	.1	.7	.9
Norway .....	.5	.2	—
Total .....	1.4	1.9	2.3
Undistributed .....	3.7	—	—
Grand total .....	12.1	11.6	3.3
<b>IMPORTS</b>			
Total .....	10.9	2.0	1.2

<sup>1</sup> Deliveries made under special aid program are excluded.  
Soviet sources.

TABLE 4.—Oats: Exports from the Soviet Union, by country of destination, 1955-57 <sup>1</sup>

Country	1955	1956	1957
	1,000 bushels	1,000 bushels	1,000 bushels
<b>Bloc countries:</b>			
Czechoslovakia .....	—	62	1,633
East Germany .....	2,680	5,787	10,651
Total .....	2,680	5,849	12,284
<b>Non-Bloc countries:</b>			
Belgium .....	—	468	510
Finland .....	902	716	1,240
Germany—West .....	—	131	—
Holland .....	—	3,080	882
Sweden .....	1,061	317	—
Yugoslavia .....	656	765	482
Total .....	2,619	5,477	3,114
Grand total .....	5,299	11,326	15,398

<sup>1</sup> Deliveries made under special aid program are excluded.  
Soviet sources.



TABLE 5.—Rye: Exports from the Soviet Union by country of destination, 1955-57<sup>1</sup>

Country	1955	1956	1957
1,000 bushels			
Bloc countries:			
Czechoslovakia .....	3,527	1,976	2,397
East Germany .....	7,220	<sup>2</sup> 10,948	10,051
Poland .....	11,940	906	55
Total .....	22,687	13,830	12,503
Non-Bloc countries:			
Denmark .....	—	27	—
Finland .....	3,559	4,193	2,933
Germany—West .....	327	1,000	—
Norway .....	504	1,189	1,177
Sweden .....	437	209	118
Total .....	4,827	6,618	4,228
Undistributed .....	—	—	614
Grand total .....	27,514	20,448	17,345

<sup>1</sup> Deliveries made under special aid programs are excluded.<sup>2</sup> 16.1 million bushels imported by East Germany, according to East German statistics.

Soviet sources.

TABLE 6.—Barley: Exports from the Soviet Union by country of destination, 1955-57<sup>1</sup>

Country	1955	1956	1957
1,000 bushels			
Bloc countries:			
Czechoslovakia .....	7,803	7,721	10,591
East Germany .....	14,578	14,275	16,153
Hungary .....	—	32	6,168
Poland .....	—	147	4,033
Total .....	22,381	22,175	36,945
Non-Bloc countries:			
Austria .....	—	657	4,717
Belgium .....	—	2,154	2,622
Denmark .....	294	886	331
Germany—West .....	—	1,167	3,390
Holland .....	441	6,953	3,757
Italy .....	—	1,089	1,042
Norway .....	808	583	—
Sweden .....	547	409	—
Yugoslavia .....	—	—	—
Total .....	2,090	13,898	15,859
Undistributed .....	1,479	—	2,953
Grand total .....	25,950	36,073	55,757

<sup>1</sup> Deliveries made under special aid program are excluded.

Soviet sources.

TABLE 7.—EXPORTS OF SPECIFIED GRAINS FROM THE SOVIET UNION, BY COUNTRY OF DESTINATION, 1958<sup>1</sup>

Country	Wheat	Rye	Barley	Corn	Oats
Million bushels					
Bloc countries:					
Albania .....	1.8	—	—	—	—
Bulgaria .....	.8	—	—	—	—
Czechoslovakia .....	35.1	2.4	1.1	5.1	.4
East Germany .....	47.7	7.4	2.3	3.1	9.0
Hungary .....	3.0	—	3.3	—	—
Poland .....	8.7	3.6	—	—	—
Rumania .....	7.1	—	—	—	—
Total .....	104.2	13.4	6.7	8.2	9.4
Non-Bloc countries:					
Austria .....	—	—	1.4	—	—
Belgium .....	—	—	.3	—	.8
Denmark .....	—	—	—	—	.5
Egypt (UAR) .....	11.6	—	—	—	—
Finland .....	10.0	2.8	—	0.5	.2
France .....	2.4	—	—	—	—
Holland .....	1.7	—	1.1	—	5.3
Italy .....	—	—	—	—	.7
Norway .....	3.8	1.2	—	—	—
Sweden .....	1.5	.3	.4	—	1.0
United Kingdom .....	2.9	—	—	—	—
West Germany .....	—	—	3.0	—	.1
Yugoslavia .....	3.3	—	—	—	—
Total .....	37.2	4.3	6.2	0.5	8.6
Undistributed .....	1.1	.4	—	—	—
Grand total ....	142.5	18.1	12.9	8.7	18.0

<sup>1</sup> Deliveries made under special aid programs are excluded. Soviet sources.



